

Sharp-Cutoff Pentode

9-PIN MINIATURE TYPE

For Audio-Amplifier Applications Critical
as to Microphonism, Leakage Noise, and Hum

GENERAL DATA

Electrical:

Heater, for Unipotential Cathode:

Voltage (AC or DC) $6.3 \pm 10\%$ volts

Current at 6.3 volts 0.15 amp

Direct Interelectrode Capacitances:^a

Pentode Connection:

Grid No.1 to plate 0.11 max. μf

Grid No.1 to cathode, grid No.3,
grid No.2, heater, and pins 2 and 6. 2.7 μf

Plate to cathode, grid No.3,
grid No.2, heater, and pins 2 and 6. 2.4 μf

Triode Connection:^b

Grid No.1 to plate 1.4 μf

Grid No.1 to cathode 1.4 μf

Plate to cathode 0.85 μf

Characteristics, Class A₁ Amplifier:

	Triode Connection ^b		Pentode Connection	
Plate Voltage	100	250	250	volts
Grid No.3	-	-	Connected to cathode	
			at socket	
Grid-No.2 Voltage	-	-	100	volts
Grid-No.1 Voltage	-3	-8	-3	volts
Amplification Factor	21	21	-	
Plate Resistance (Approx.)	0.017	0.0137	2	megohms
Transconductance	1240	1530	1000	μmhos
Plate Current	2.2	5.5	1.8	ma
Grid-No.2 Current	-	-	0.4	ma
Grid-No.1 Voltage (Approx.) for plate . .				
$\mu\text{a} = 10$	-	-	-8	volts

Mechanical:

Operating Position Any

Maximum Overall Length $2\text{-}3/16"$

Maximum Seated Length $1\text{-}15/16"$

Length, Base Seat to Bulb Top (Excluding tip) $1\text{-}9/16" \pm 3/32"$

Diameter $0.750"$ to $0.875"$ ←

Dimensional Outline See General Section

Bulb T6-1/2

Base Small-Button Noval 9-Pin (JEDEC No.E9-1)

← Indicates a change.



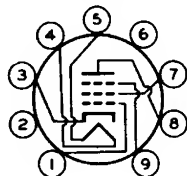
RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.

DATA I
3-61

5879

Basing Designation for BOTTOM VIEW. 9AD

Pin 1—Grid No.1
Pin 2—No Connection
Pin 3—Cathode
Pin 4—Heater
Pin 5—Heater



Pin 6—No Connection
Pin 7—Grid No.2
Pin 8—Plate
Pin 9—Grid No.3

AMPLIFIER — Class A₁

→ Maximum Ratings, Design-Maximum Values:

	Triode Connection ^b	Pentode Connection	
PLATE VOLTAGE.	275 max.	330 max.	volts
GRID No.3 (SUPPRESSOR GRID).	—	Connect to cathode at socket	
GRID-No.2 (SCREEN-GRID) SUPPLY VOLTAGE.	—	330 max.	volts
GRID-No.2 VOLTAGE.	—	See Grid-No.2 Input Rating Chart at front of Receiving Tube Section	
GRID-No.1 (CONTROL-GRID) VOLTAGE:			
Negative-bias value.	55 max.	55 max.	volts
Positive-bias value.	0 max.	0 max.	volts
GRID-No.2 INPUT:			
For grid-No.2 voltages up to 165 volts.	—	0.25 max.	watt
For grid-No.2 voltages between 165 and 330 volts.	—	See Grid-No.2 Input Rating Chart at front of Receiving Tube Section	
PLATE DISSIPATION.	1.7 max.	1.25 max.	watts
PEAK HEATER-CATHODE VOLTAGE:			
Heater negative with respect to cathode.	100 max.	100 max.	volts
Heater positive with respect to cathode.	100 max.	100 max.	volts

Typical Operation as Resistance-Coupled Amplifier:

See RESISTANCE-COUPLED-AMPLIFIER CHARTS No.26 & No.27
at front of this Section

Maximum Circuit Values:

	Triode Connection ^b	Pentode Connection	
Grid-No.1-Circuit Resistance	2.2 max.	2.2 max.	megohms

^a without external shield.

^b Grid No.3 and grid No.2 connected to plate.

→ Indicates a change.

RADIO CORPORATION OF AMERICA
Electron Tube Division

Harrison, N. J.



5879

OPERATING CONSIDERATIONS

It is recommended that pins 2 and 6 be grounded in all applications. Grounding of these pins will effectively shield grid No. 1 and plate from heater and help to reduce hum level when an ac heater supply is used.

← Indicates a change.

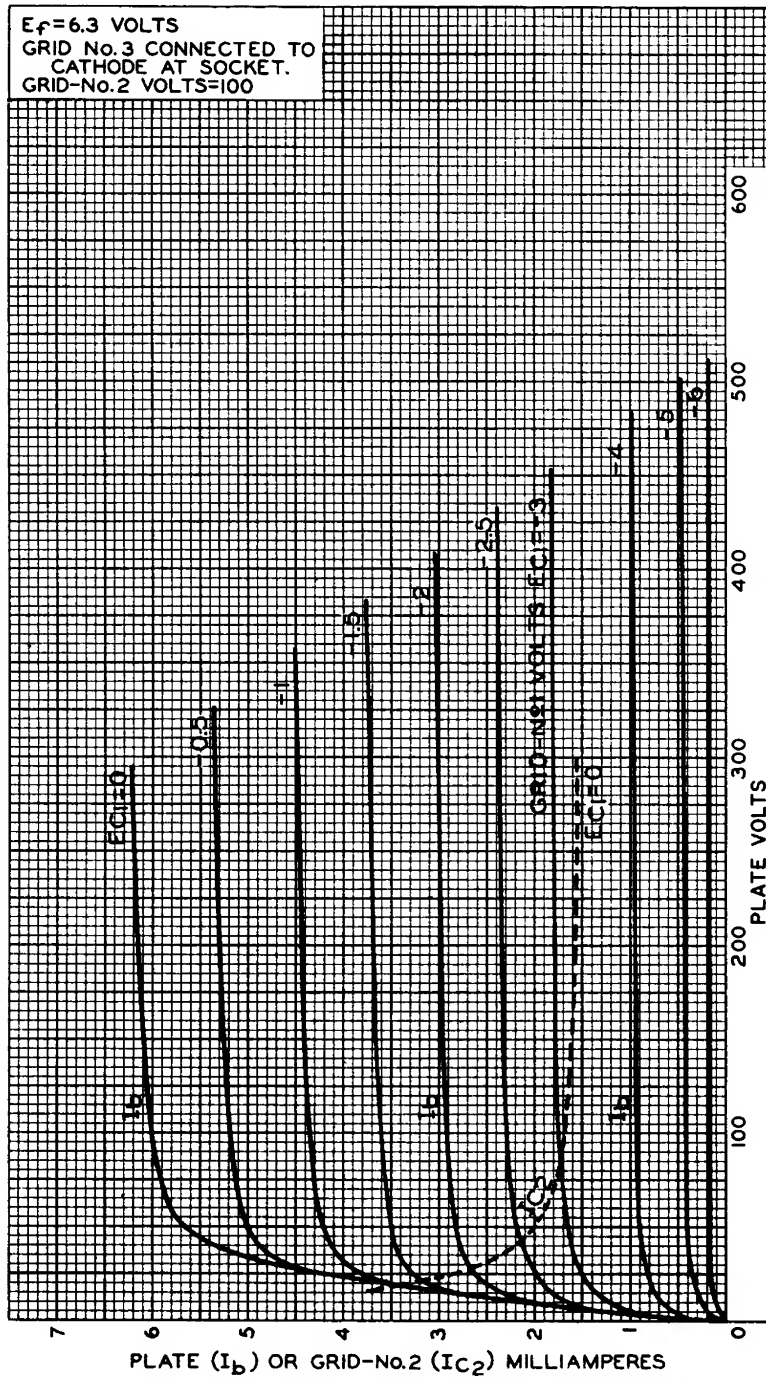


RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.

DATA 2
3-61

5879

AVERAGE CHARACTERISTICS Pentode Connection



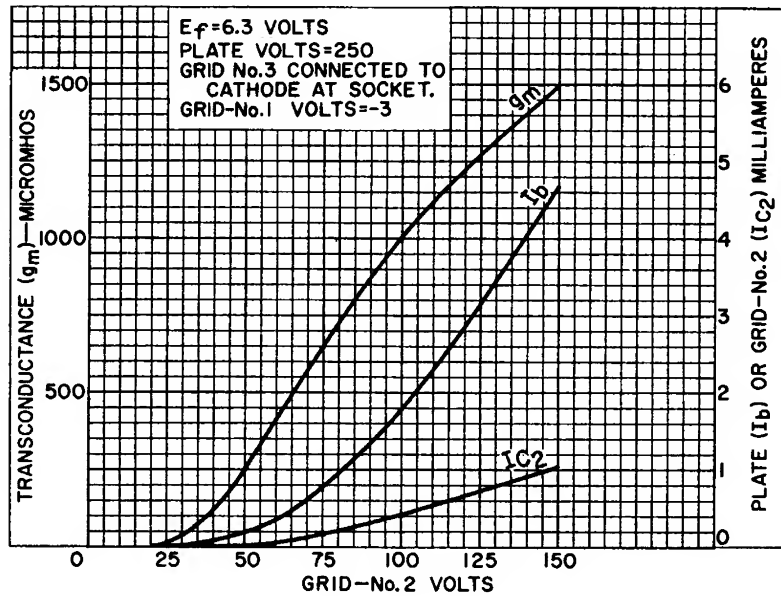
92CM - 7439R1

RADIO CORPORATION OF AMERICA
 Electron Tube Division

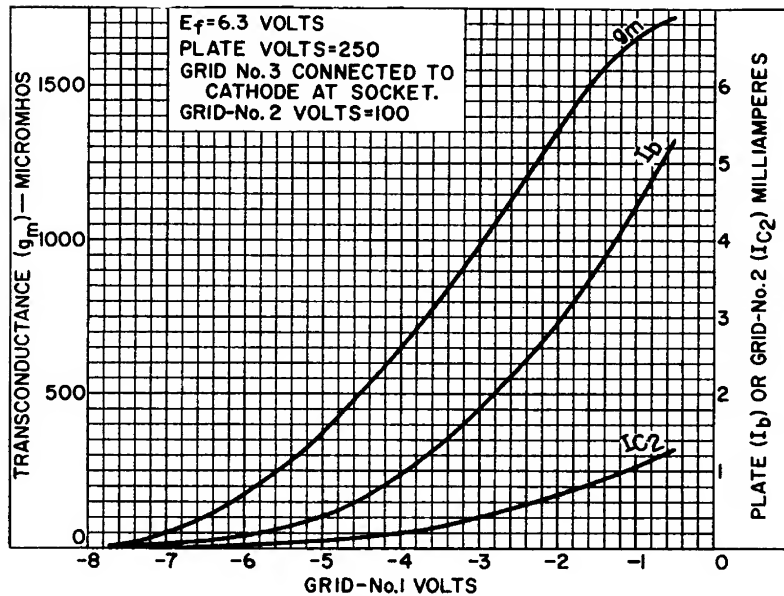
Harrison, N. J.



AVERAGE CHARACTERISTICS Pentode Connection



92CS-11053



92CS-11052

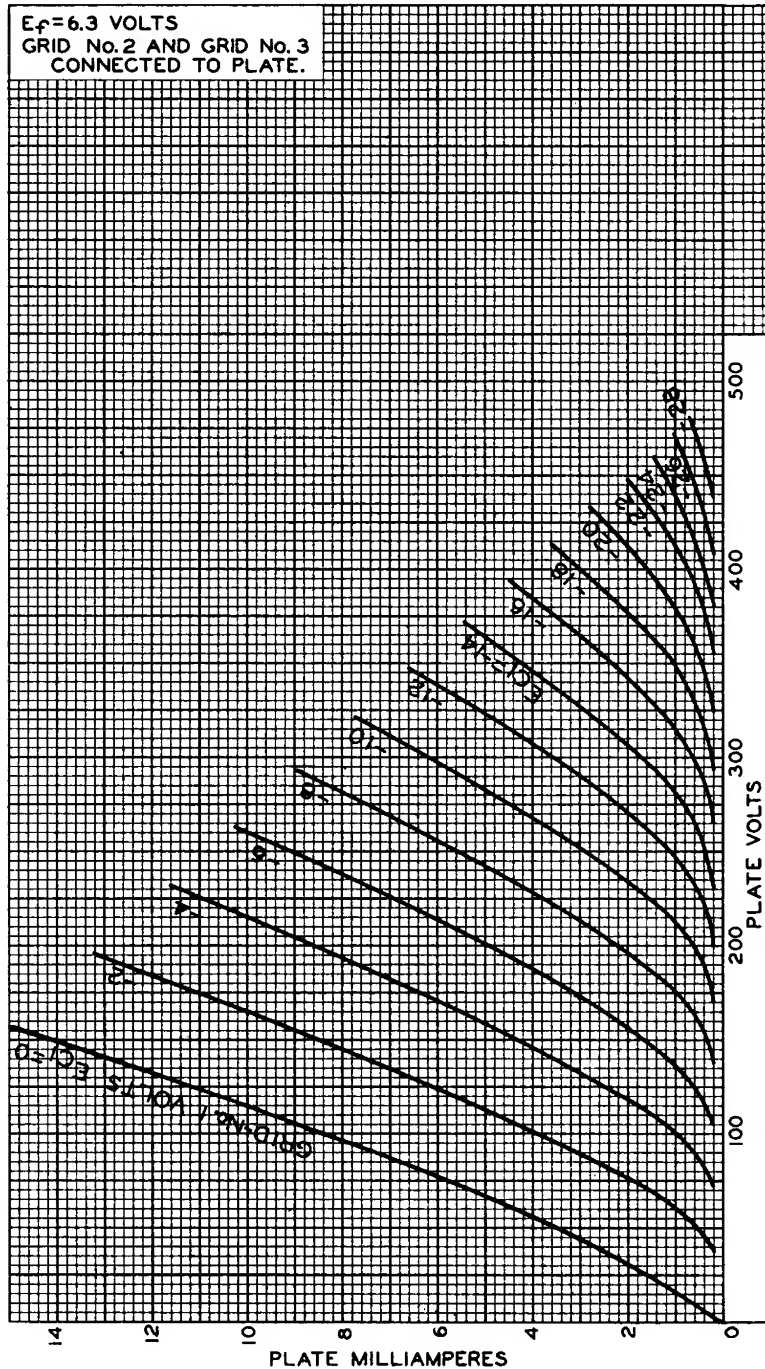


RADIO CORPORATION OF AMERICA
Electron Tube Division
Harrison, N. J.

DATA 3
3-61

5879

AVERAGE PLATE CHARACTERISTICS Triode Connection



92CM-7446

RADIO CORPORATION OF AMERICA
Electron Tube Division

Harrison, N. J.

